

Appl. Serial No.: 10/603,946  
Amendment dated April 5, 2005  
Reply to Office action of January 27, 2005

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Original) A system for in-situ verification and calibration of flow control devices, comprising:
  - a flow verification device;
  - a first network physical layer for connecting the flow control devices to the flow verification device; and
  - a second network physical layer connected to the flow verification device;wherein a controller of the flow verification device is programmed to verify and, if necessary, calibrate the flow control devices over the first network physical layer based upon a single command provided through the second network physical layer.
2. (Presently amended) A system according to claim 1, wherein the first network physical layer comprises a an EtherNet/IP network physical layer.
3. (Presently amended) A system according to claim 1, wherein the second network physical layer ~~comprises a DeviceNet™ network physical layer~~ is based on a broadcast-oriented, communications protocol.
4. (Original) A system according to claim 1, wherein the flow verifier is a rate-of-rise flow verifier.

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5. (Presently amended) A system according to claim 4, wherein the flow verifier is a GBROR™ modular, in-situ flow verifier.
6. (Presently amended) A system according to claim 4, wherein the flow verifier is a Tru-Flo™ process transparent, in-situ flow verifier.
7. (Original) A system according to claim 1, further comprising flow control devices connected to the first network physical layer.
8. (Original) A system according to claim 7, wherein the flow control devices comprise pressure insensitive type mass flow controllers.
9. (Original) A system according to claim 1, further comprising a hub connected to the first network physical layer.
10. (Original) A system according to claim 9, wherein the hub comprises a BlueBex™ communications manager that can support connectivity software for data collection and routing.
11. (Original) A method for in-situ verification and calibration of flow control devices, comprising:
- connecting a flow verification device to the flow control devices through a first network physical layer;
- connecting a second network physical layer to the flow verification device; and
- programming a controller of the flow verification device to verify and, if necessary, calibrate the flow control devices over the first network physical layer based upon a single command provided through the second network physical layer.

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12. (Presently amended) A method according to claim 11, wherein the first network physical layer comprises a an Ethernet/IP network physical layer.

13. (Presently amended) A method according to claim 11, wherein the second network physical layer ~~comprises a DeviceNet™ network physical layer~~ is based on a broadcast-oriented communications protocol.

14. (Original) A method according to claim 11, wherein the flow verifier is a rate-of-rise flow verifier.

15. (Presently amended) A method according to claim 14, wherein the flow verifier is a ~~GBROR™~~ modular, in-situ flow verifier.

16. (Presently amended) A method according to claim 14, wherein the flow verifier is a ~~Tru Flo™~~ process transparent, in-situ flow verifier.

17. (Original) A method according to claim 11, wherein the flow control devices comprise pressure insensitive type mass flow controllers.

18. (Original) A method according to claim 11, further comprising connecting a hub to the first network physical layer.

19. (Presently amended) A method according to claim 18, wherein the hub comprises a ~~BlueBox™~~ communications manager that can support connectivity software for data collection and routing.

20. (Original) A method according to claim 11, wherein the flow verification device is put in fluid communication with the flow control devices through a gas manifold.